# **Understanding Who Uses Whole Health Services: A Program Evaluation**

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#### **Abstract**

Background: The Veterans Health Administration is rolling out a Whole Health system of care as part of an enhanced focus on proactive, person-centered healthcare.

**Objective:** Our program evaluation seeks to characterize what Veterans use Whole Health services, for what diagnoses they are seeking Whole Health services, and to examine "high utilizers" of Whole Health services.

Methods: Data were collected on 174 Veterans using Whole Health services from December 2018 through March 2020 and consisted of chart review and self-report data.

Results: Women were more likely than men Veterans to use individual only Whole Health services. High utilizers (the top 30% of the sample in Whole Health services used) were more likely to attend groups than the remainder of the sample.

Conclusion: Future work should examine the community-building aspects of Whole Health and ways to create group programming tailored to women Veterans.

## **Keywords**

veterans, whole health, program evaluation

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The Veterans Health Administration (VA) is in the midst of transforming healthcare for Veterans from a reactive, diseasefocused system to a proactive, person-centered system.<sup>1,2</sup> This transformation to a Whole Health system of care extends the VA's emphasis on patient-centered care (eg, patient aligned care teams, primary care-mental health integration) to include what matters most to each Veteran. The Whole Health system consists of three primary parts: the Pathway (eg, exploration of what matters most individually, with coaches, or in groups), Well-being programs (eg, yoga, mindfulness), and Whole Health clinical care (eg, a clinical approach integrating what matters most into treatment).<sup>3</sup> A recent report of VA's Whole Health rollout at 18 flagship sites showed that, across 2 years of the evaluation period, Veterans increasingly used both Pathway and Well-being services. Whole Health service use also increased among specific groups of Veterans, including Veterans with chronic pain, chronic conditions (eg, obesity), and mental health conditions.<sup>4</sup>

To complement findings from the comprehensive flagship sites report, we report on Whole Health service utilization at a VA in the Northeast. Our purpose is to explore three questions: Who is using Whole Health services, for what are Veterans using the services, and who are "high-utilizers" of Whole Health services? We characterize demographics, diagnoses, and Whole Health services used for Veterans

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participating in a Whole Health program evaluation. This report provides timely data that enhances understanding of who and for what Veterans are using Whole Health services that may help other VA sites to increase equitable utilization by Veterans.

# **Method**

# Participants and Procedures

The program evaluation started as new Whole Health Pathway and Well-being services began at the local VA medical center and two community-based outpatient clinics in December 2018. Data were collected on 174 Veterans who initiated Whole Health services between December 2018 and September 2019. Following each participant's initiation of services, 6 months of electronic medical record (EMR) healthcare utilization data were collected, with latest utilization data coming from March 2020. This report focuses on data prior to April 2020 to avoid results being affected by the COVID-19 pandemic. Veterans were invited and typically initiated participation in the evaluation during a Whole Health Individual Coaching session or the Whole Health Program Orientation Group. Participants completed initial self-report packets received at the time of their first Whole Health visit and follow-up packets three and 6 months later. Self-report data used for the current analyses consist of gender, race, ethnicity, and employment and marital status. EMR data gathered included: type and frequency of Whole Health services, age and encounter diagnoses listed at time of first appointment, and presence of an opioid prescription. The local IRB determined this program evaluation a non-research activity.

# Analyses

Participant characteristics and service utilization were described primarily with frequencies and means. High utilizers (n = 53) were defined as those who attended eight or more Whole Health appointments, representing the upper 30% of utilization in our sample. Diagnoses were searched and categorized (yes/no) into one of the 22 ICD-10 diagnostic categories.<sup>5</sup> Pearson chisquares were conducted for follow-up analyses.

# **Results**

Of 174 participants, 75% (n = 131) were men. Ages ranged from 22 to over 90, with a mean (standard deviation) of 56 years (15). Most participants identified as not Hispanic/Latino (93%, n = 162, vs 5% Hispanic/Latino and 2% declined to answer) and Caucasian/White (84%, n = 146). Twenty participants (11%) identified as African American/Black; four or fewer participants identified in each of the following categories: Native American (4), Asian (1), multiracial (1), or unknown/declined to answer (2). The modal marital status was married (42%, n = 73), followed by

divorced (21%, n = 36), single (20%, n = 34), missing data (15%, n = 26), widowed (2%, n = 3), and separated (1%, n = 2). At baseline, <sup>2</sup> 52 participants (30%) reported working, 52 (30%) were retired, 14 (8%) were unemployed, and 47 (27%) endorsed a category that included being disabled (32 disabled, 9 disabled/retired, 4 disabled/working, 2 disabled/unemployed). One person endorsed student status and 23 had missing employment data.

Descriptively, high utilizers were slightly older (mean age = 62 years) than the total sample, but similar regarding gender, ethnicity, race, and marital categorizations (25% women, 94% not Hispanic/Latino, 83% Caucasian/White, 40% married). Differences did emerge in follow-up analyses regarding employment status, with 47% of high utilizers retired and 19% working. High utilizers were more likely to be retired (N = 151,  $x^2$ [1]= 7.29, P < .01) and less likely to be working (N = 151,  $x^2$ [1]= 6.90, P < .01) than the remaining 70% of the sample.

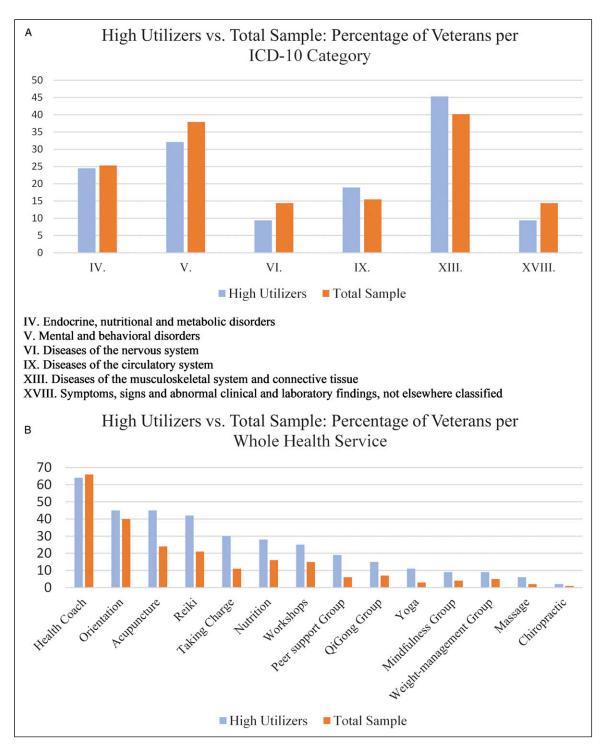
Figure 1 compares the total sample vs high utilizers on ICD-10 diagnostic categories (panel A) and Whole Health services used (panel B). Panel A depicts the six most common ICD-10 categories for the total sample and high utilizers with descriptively similar rates across both groups. Panel B shows that high utilizers had descriptively higher usage rates for several Whole Health services (eg, acupuncture [45% to 24%], Taking Charge [30% to 11%], Peer-support group [19%, 6%]) compared to the full sample. Follow-up analyses revealed that high utilizers were significantly more likely to use group services (ie, attended only groups or combination of groups and individual services vs only attending individual services) than the remaining 70% of the sample (N = 174,  $x^2$  [1]= 13.37, P < .01), with 79% of high utilizers using groups vs only 50% of the rest of the sample.

Finally, we explored whether men and women participants differed in their use of Whole Health services. For example, health coaching was used by 98% (n = 42) of women vs only 56% (n = 73) of men; while over half of men (53%, n = 69) attended orientation, only one woman (2%) attended. Follow-up analyses revealed that women were more likely (N = 174,  $x^2[1]=25.70$ , P < .01) to utilize individual services only (74%) compared to men (31%).

## **Discussion**

Several interesting results emerged from our program evaluation that should be examined in future work. First, high utilizers were more likely than the rest of the sample to be retired and participate in Whole Health groups. Anecdotally, these Veterans were also observed to engage in additional activities together that were not facilitated by VA (eg, eating lunch together). This finding suggests that Whole Health programming may help to facilitate building Veteran to Veteran relationships that may extend beyond VA services. This may be particularly relevant as we heal from the effects of the COVID pandemic, which has contributed to increased

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**Figure 1.** Note. For both panels, bars display percentages of high utilizers (n = 53) and total sample (N = 174). For panel A, participants could have multiple diagnoses and be represented in multiple ICD-10 categories. For panel B, participants often engaged in more than one service and thus are represented in multiple bars. See VA's Whole Health Web site <sup>7</sup> for more information and description regarding specific Whole Health services.

isolation for many. Perhaps the continued growth of the Whole Health system in VA is one way to encourage and support Veteran re-engagement with other Veterans and the Veteran community, especially among retired or disabled Veterans.

Interesting results also emerged regarding women Veterans and Whole Health. Per VA Support Service Center (VSSC) data, a higher percentage of women Veterans were part of our sample (25%) than in the Northeast VA population

(10%). There could be many reasons for this. The Women's Health Clinic was an early adopter of Whole Health and offered health coaching from a woman Health Coach or Veteran peer. Women Veterans also use integrative medicine at high rates. Additionally, we found that, compared to men, women Veterans were more likely to engage in individual only services. Taken together, these results suggest 1. Whole Health may be an important way to engage women Veterans in care and 2. women Veterans may benefit from further development of women-specific group programming, as previous research has linked treatment tailored to women (eg, women-only groups) to perceived access to mental health treatment.

Our sample consisted primarily of Veterans who identified as White (84%), consistent with our local VA population (85%) per VSSC data. Limitations (eg, sample size, majority white and men, short follow-up timeframe) preclude firm conclusions from the current work. An important next step for Whole Health implementation research is to examine the degree to which rates of other service utilization (eg, hospitalization, primary care visits) are impacted by participation in Whole Health services. Relatedly, future work should examine the impact of a Whole Health system of care on healthcare costs, quality and satisfaction with healthcare, and key clinical outcomes (eg, pain, depressive symptoms).

#### **Author's Note**

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## **Declaration of Conflicting Interests**

Dr. Grewal is the Women's Health Medical Director and Whole Health Clinical Director for Syracuse VAMC. The other authors do not have any conflicts of interest to report. The views in this article are those of the authors and do not necessarily reflect the official position or policy of the Department of Veterans Affairs or the United States government.

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#### **Notes**

- 1. Some participants were engaged in services that both exist as a part of and independent of Whole Health (eg, weight-management program, chiropractic). Whole Health appointments were not counted as a first appointment if they occurred prior to starting the Whole Health evaluation and thus not included in the service utilization data. However, once the Veteran started the program evaluation, ongoing Whole Health services were included in service utilization data if they occurred during the 6-month time frame.
- 2. Participants who endorsed disabled plus another employment status (eg, disabled and working) were included in the additional employment status for descriptive and chi square analysis purposes. Eg, 52 participants who reported working includes 4 participants who reported disabled and working status.
- Employment status re-categorized as retired vs not-retired for first chi-square and working vs not working for second chisquare.

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